

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 37, line 15, with the following amended paragraph:

FIG. 16B shows an exemplary data transform table. It shows the case where the input data are 1110b shown in FIG. 15, that is, when the binary image data (A, B, C, D) = (1, 1, 1, 0) and the position information “a” through “i” are input, the output data (PWM duty) are 100%, 100%, 100%, 0%, 100%, 100%, 75%, 50%, and 50%, respectively. Additionally, the phase data (the position of the PWM pulse) of the output multi-level data ~~“e”, “g”, and “i”~~ ~~“g”, “h”, and “i”~~ are 0 (middle), -1 (shifted to the left), 0 (middle), and -1 (shifted to the left), respectively.

Please replace the paragraph beginning at page 38, line 18, with the following amended paragraph:

The phase data indicating the position of PWM pulse are computed as follows:

$$e=B-A,$$

$$i=D-C, \text{ and}$$

$$g=B+D-(A+C)[[.]],$$

$$h=0, \text{ and}$$

$$j=D-C.$$

Please replace the paragraph beginning at page 39, line 4, with the following amended paragraph:

In the 3x3 matrix of the output multi-level data “a” through “i” formed by the adjacent 3 pixels in the adjacent 3 scan lines, the output multi-level data “a”, “b”, “c”, “d” in

sub-matrixes obtained by dividing the 3x3 matrix with the middle pixel array “e”, “g”, “i” and the middle scan line “f”, “g”, “h” (in this case, each sub-matrix includes only 1 element) are determined to be the “same” data as the input binary data A, B, C, D. The output multi-level data “e” and “i” of the middle pixel array are determined based on the input binary data (A, B) and (C, D), respectively. The output multi-level data “f” and “h” of the middle scan line are determined based on the input binary data (A, C) and ~~(C, D)~~ (B, D), respectively. The output multi-level data “g” at the crossing point of the middle pixel array and the middle scan line is determined based on the input binary data A, B, C, D.